

REMARKS

Claims 1-11 remain pending in this case. Reconsideration and allowance of the application are respectfully requested.

Claims 1-3, 5, and 12-13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,799,121 (*Duck*) in view of USP 4,111,524 (*Tomlinson*). Claims 7-9 and 11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over *Duck* in view of *Tomlinson* (combination referred to as DIT) and further in view of Applicant's disclosure of prior art. Claims 4, 10, 14-16 and 18-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over DIT and further in view of USP 6,499,886 (*Mizuno*). In response, Applicant continues to traverse the rejections.

One of the primary features of the invention is a filter module which includes three optical fibers arranged on a single side of a lens, the first optical fiber receives the wavelength multiplex optical signal from the lens or outputs the wavelength multiplex optical signal to the lens, the second optical fiber receives or outputs the optical signal reflected by the filter, and the third optical fiber receives or outputs the optical signal reflected by the mirror after being transmitted through the optical filter.

Duck (USP 5,799,121) discloses a multi-port optical device having first, second and third optical fibers 42, 44 and 46 and first and second GRIN lenses 43a, 43b, and a filter 48 (Figure 4). The optical fibers 42, 44 are located at an input side of lens 43a. The filter 48 is located between the GRIN lenses 43a, 43b. The third optical fiber 46 is located at an output side of GRIN lens 43b.

A light signal that is not passed through and reflected by filter 48 enters the second optical fiber 44 located at the input side of second lens 43b. The light signal that passes through filter 48 enters the third optical fiber 46 located at the output side of second lens 43b.

To the contrary, in the claimed device, the light signal from a first optical fiber that is not passed through but reflected by the filter enters a second optical fiber in the same manner as in *Duck*. However, the difference is that, in the claimed device, light passing through the filter is reflected by a mirror and is returned into a third optical fiber different from the first and second optical fibers. To see how this is so, Applicant notes there is a small gap between the filter 22 and the mirror 30 as shown in Figure 3 of the present application. The gap provides a light path through which the reflected light passes. This enables the light passed through the gap to enter the third optical fiber, thus leading to the present design advantages, including a compact structure.

Tomlinson (USP 4,111,524) discloses a wavelength division multiplexer having a grin-rod lens 15 and a grating 16. Grating 16 is a reflective type grating such that reflected light signals have light paths different from each other with respect to each wavelength. Accordingly, the reflected light signals of *Tomlinson's* device cannot be divided into a signal in a particular wavelength band and a signal in a wavelength band other than the particular wavelength band, contrary to the present preferred embodiments. In sum, *Tomlinson* cannot achieve the goals of the preferred embodiments in its compact design.

Mizuno (USP 6,499,886) discloses glass parts for connecting optical fibers. *Mizuno* clearly fails to disclose and teach the claimed device.

Therefore, it is respectfully submitted that the rejections should be reconsidered and withdrawn and that the present application (including independent claims 1 and 7, and their dependent claims) be allowed. Such action is respectfully requested.

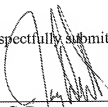
CONCLUSION

In view of the present amendments and above remarks, pending claims 1-11 are believed to be novel and non-obvious over the cited art and an indication to that effect is respectfully requested.

Should the Examiner have any questions or wish to discuss this case further for any reason, he is invited to contact the undersigned at the telephone number appearing below.

Applicant respectfully requests a two-month extension of time. The Examiner is authorized to charge fees in the amount of \$450.00 for payment of a two-month extension of time to Deposit Account 50-1170. Nevertheless, if any other fees are found payable in conjunction with this or any further communication, the Commissioner is authorized to direct payment of such fees or credit any overpayment, to Deposit Account 50-1170.

Respectfully submitted,



Jay G. Durst
Reg. No. 41,723

Dated: January 8, 2007
BOYLE, FREDRICKSON, NEWHOLM,
STEIN & GRATZ S.C.
250 Plaza, Suite 1030
250 East Wisconsin Avenue
Milwaukee, WI 53202
Telephone: (414) 225-9755
Facsimile: (414) 225-9753
Attorney Docket No. 693.007
Customer No. 23598